



Paul Pepler  
GZA GeoEnvironmental, Inc. (NH)  
380 Harvey Road  
Manchester, NH 03103



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 128524  
Client Identification: PSNH-MK | 3902  
Date Received: 1/29/2014

Dear Mr. Pepler:

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at [www.eailabs.com](http://www.eailabs.com) for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted

< : "less than" followed by the reporting limit

> : "greater than" followed by the reporting limit

%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

2.19.14

Date

20

# of pages (excluding cover letter)



# SAMPLE CONDITIONS PAGE

EAI ID#: 128524

Client: GZA GeoEnvironmental, Inc. (NH)

Client Designation: PSNH-MK | 3902

Temperature upon receipt (°C): 6.1

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date	Date	Sample	% Dry	Exceptions/Comments (other than thermal preservation)
		Received	Sampled	Matrix	Weight	
128524.01	Combination WW	1/29/14	1/29/14	aqueous		Adheres to Sample Acceptance Policy

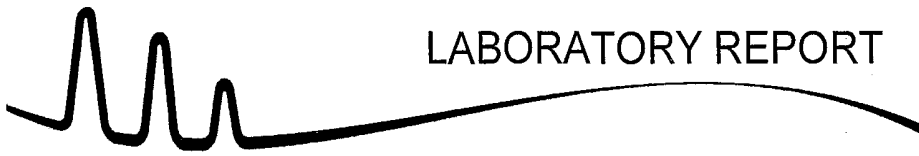
Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th Edition, 1998 and 22nd Edition, 2012
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 2nd edition, 1992



# LABORATORY REPORT

EAI ID#: 128524

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK | 3902**

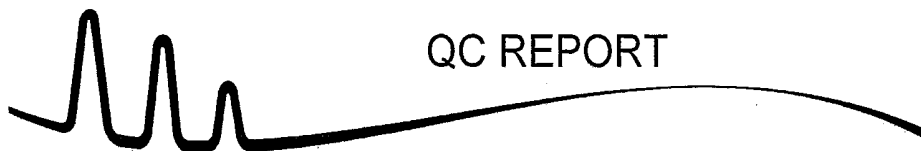
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Sample ID:

Combination WW

Lab Sample ID: 128524.01  
Matrix: aqueous  
Date Sampled: 1/29/14  
Date Received: 1/29/14  
Units: mg/L  
Date of Extraction/Prep: 1/30/14  
Date of Analysis: 1/30/14  
Analyst: SH  
Method: 1664B  
Dilution Factor: 1

Oil & Grease (HEM) 14



## QC REPORT

EAI ID#: 128524

Client: GZA GeoEnvironmental, Inc. (NH)

Batch ID: 635266-73478/A013014OG1661

Client Designation: PSNH-MK | 3902

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Oil & Grease (HEM)	< 5	36 (89 %R)	35 (87 %R) (2 RPD)	1/30/2014	mg/L	78 - 114	18	1664B

Samples were extracted and analyzed within holding time limits.

Instrumentation was calibrated in accordance with the method requirements.

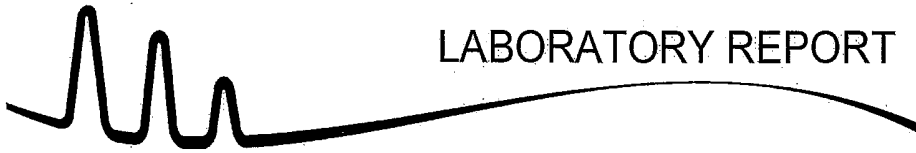
The method blanks were free of contamination at the reporting limits.

Sample surrogate recoveries met the above stated criteria.

The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.

There were no exceptions in the analyses, unless noted.

\*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted below, flagged analytes that exceed acceptance limits in the Quality Control sample were not detected in the field samples.



# LABORATORY REPORT

EAI ID#: 128524

Client: GZA GeoEnvironmental, Inc. (NH)

Client Designation: PSNH-MK | 3902

Sample ID: Combination WW

Lab Sample ID: 128524.01

Matrix: aqueous

Date Sampled: 1/29/14

Date Received: 1/29/14

Solids Total 350000

Solids Suspended 87

Chloride 150000

Nitrite-N 45

Nitrate-N 2500

Ammonia-N 4.3

TKN 200

Total Nitrogen 2745

Total Phosphorus-P < 1

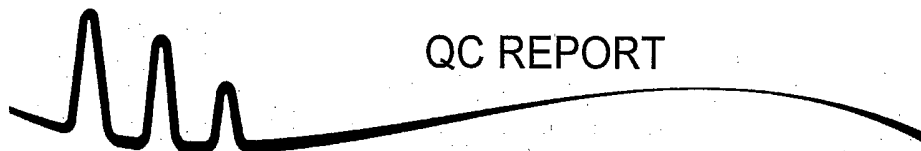
CBOD < 6

COD 5100

Units	Analysis			
	Date	Time	Method	Analyst
mg/L	1/30/14	15:20	2540B-97	SCW
mg/L	1/31/14	10:00	2540D-97	SCW
mg/L	1/30/14	16:20	4500CIE-97	KD
mg/L	1/30/14	15:58	353.2	KD
mg/L	1/30/14	16:49	353.2	KD
mg/L	2/04/14	13:30	4500NH3D	KJP
mg/L	1/30/14	11:28	4500N <sub>org</sub> C/N	SEL
mg/L	2/03/14	10:30	4500 <sub>org</sub> C/NO	SEL
mg/L	2/03/14	11:26	365.1	SEL
mg/L	1/30/14	10:57	5210B-01	SCW
mg/L	2/03/14	12:00	H8000	SCW

Total Phosphorus-P: Due to sample dilution the detection limit was elevated.

Total Nitrogen is determined by the addition of Nitrate-N, Nitrite-N and TKN (TKN = Ammonia plus TON) concentrations.



# QC REPORT

EAI ID#: 128524

Client: **GZA GeoEnvironmental, Inc. (NH)**

Client Designation: **PSNH-MK | 3902**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 10	1080 (98% Rec)	NA	mg/L	1/30/14	85 - 115		2540B-97
Solids Suspended	< 5	90 (99 %R)	89 (98 %R) (1 RPD)	mg/L	1/31/14	90 - 110	20	2540D-97
Chloride	< 1	26 (103 %R)	26 (105 %R) (2 RPD)	mg/L	1/30/14	90 - 110	20	4500CIE-97
Nitrite-N	< 0.5	5.3 (106 %R)	5.3 (105 %R) (1 RPD)	mg/L	1/30/14	90 - 110	20	353.2
Nitrate-N	< 0.5	5.3 (105 %R)	5.3 (106 %R) (1 RPD)	mg/L	1/30/14	90 - 110	20	353.2
Ammonia-N	< 0.05	2.1 (103 %R)	2.0 (101 %R) (2 RPD)	mg/L	2/4/14	90 - 110	20	4500NH3D
TKN	< 0.5	10 (102 %R)	10 (101 %R) (1 RPD)	mg/L	1/30/14	90 - 110	20	4500N <sub>org</sub> C/N
Total Phosphorus-P	< 0.01	0.29 (98 %R)	0.29 (97 %R) (1 RPD)	mg/L	2/3/14	90 - 110	20	365.1
CBOD	< 6	360 (91 %R)	360 (90 %R) (1 RPD)	mg/L	1/30/14	60 - 120	20	5210B-01
COD	< 10	98 (98 %R)	98 (98 %R) (0 RPD)	mg/L	2/3/14	85 - 115	20	H8000

Samples were analyzed within holding times unless noted on the sample results page.

Instrumentation was calibrated in accordance with the method requirements.

The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

\*! Flagged analyte recoveries deviated from the QA/QC limits.



Frontier Global Sciences

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425.686.1996 Phone  
425.686.3096 Fax

13 February 2014

Jeff Gagne  
Eastern Analytical, Inc  
25 Chenell Drive  
Concord, NH 03301  
RE: Merrimack Station 200.8

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Liz Siska".

Liz Siska  
Project Manager



Frontier Global Sciences

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Bothell, WA 98011  
425.686.1996 Phone  
425.686.3096 Fax

Eastern Analytical, Inc  
25 Chenell Drive  
Concord NH, 03301

Project: Merrimack Station 200.8  
Project Number: -  
Project Manager: Jeff Gagne

Reported:  
13-Feb-14 13:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Combination WW	1401656-01	Water	29-Jan-14 07:50	30-Jan-14 10:45
B-131151 Field Blank Hg	1401656-02	Water	29-Jan-14 07:50	30-Jan-14 10:45

Eurofins Frontier Global Sciences, Inc.

Liz Siska, Project Manager

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Eastern Analytical, Inc  
25 Chenell Drive  
Concord NH, 03301

Project: Merrimack Station 200.8  
Project Number: -  
Project Manager: Jeff Gagne

Reported:  
13-Feb-14 13:59

#### SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 1/30/2014 10:45:00 AM. The samples were received intact, on-ice within a sealed cooler at 4.8 degrees Celsius.

#### SAMPLE PREPARATION AND ANALYSIS

Samples were prepared and analyzed for total mercury by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631E.

Samples were prepared and analyzed for total recoverable metals by inductively coupled plasma mass spectrometry (ICP-MS) in KED mode in accordance with EPA 200.8 (EFGS-054).

#### ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Eurofins Frontier Global Sciences, Inc.

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Liz Siska, Project Manager

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## Sample Receipt Checklist

EFGS Work Order: 1A01656Client: Eastern AnalyticalDate & Time Received: 1/30/14 10:45Date Labeled: 1/31/14

Project: \_\_\_\_\_

Received By: AMMBLabeled By: AMMB# of Coolers Received: 1Samples Arrived By: ✓ Shipping Service \_\_\_\_\_

Courier \_\_\_\_\_

Hand \_\_\_\_\_

Other (Specify): \_\_\_\_\_

Coolant: ☐ None/Ambient☒ Loose Ice☐ Gel Ice☐ Dry IceCoolant Required: YTemp Blank Used: Y for Cooler(s): \_\_\_\_\_

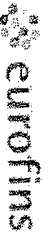
Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody seals are present and intact:	<u>N/A</u>	
Custody seals signed:	<u>N/A</u>	

TID:	CF:	°C	Date/Time:	By:
Cooler 1:	<u>5.4</u>	<u>4.8</u>	<u>1/30/14</u>	<u>AMMB</u>
Cooler 2:	°C	w/CF:	°C	w/CF:
Cooler 3:	°C	w/CF:	°C	w/CF:

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>58</u>	
Date and time of collection:	<u>58</u>	
Sampled by:	<u>2/14</u>	
Preservation type:		
Requested analyses:	<u>58</u>	
Required signatures:	<u>58</u>	
Internal COC required:	<u>2</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>N/A</u>	

Anomalies/Non-conformances (attach additional pages if needed):



Frontier Global Sciences

Page 1 of 1

Chain of Custody Record & Laboratory Analysis Request:  
Air, Water, Sediments, Plant and Animal Tissue,  
Hydrocarbon & Other Samples

11720 Northcreek Pkwy N, Suite 400

Bothell, WA 98011

Phone: 425-686-1996

Fax: 425-686-3096

info@FrontierGS.com

http://www.FrontierGS.com

Client: Eastern Analytical Inc		Contact: Jeff Gagne		EFGS PM: LIZ Siska									
Address: 25 Chenell Drive		Phone: 603/228-4591		Date: 1/29/14									
Concord, NH 03301		E-mail: jefg@eastlabs.com		TAT (business days): 20 (std)									
Project Name: Merrimack Station		Contract/PO: 41223		15 (10) 5 4 3 2 24 hrs.									
Report To: Same as above		Invoice To:		(For TAT < 10 days, contact PM. Surcharges apply for expedited TAT)									
Address: Same		Address:		Saturday delivery? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N									
Phone: 603		Phone: 603		(If yes, please contact PM)									
E-mail: customerservice@eastlabs.com		E-mail:		EDD <input checked="" type="checkbox"/> Y <input type="checkbox"/> N									
Engraved Bottle ID		Sample ID		QA <input type="checkbox"/> Standard <input type="checkbox"/> High									
No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	Sampled By	Field Filtered (Y/N)	Field Preserved: HNO <sub>3</sub> HCl BrCl Other (%)	Analyses Requested		Comments		
1	B-131160	B-131165	2	AA	1/29/14 0750	PTP	N	-	<input checked="" type="checkbox"/>		metals include Hg, As, Ag		
2	B-131151	Field Blank Hg	1	AA	1/29/14 1350	PTP	N				200.8 u/L Collision Cell		
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
For Laboratory Use Only						Relinquished By: [Signature]						Received By: [Signature]	
COC Seal: N/A						Name: [Signature]						Name: A. GATM	
Cooler Temp: ambient						Name: [Signature]						Organization: EFGS	
Carrier: UPS						Name: [Signature]						Organization: EFGS	
VTSR: 1045						Name: [Signature]						Date & Time: 1/30/14 1045	
# of Coolers: 1						Name: [Signature]						Date & Time: 1/30/14 1045	
Sample Disposal:						Name: [Signature]						Date & Time: 1/30/14 1045	
Return (shipping fees may apply)						Name: [Signature]						Date & Time: 1/30/14 1045	
Standard Disposal - 30 Days after report						Name: [Signature]						Date & Time: 1/30/14 1045	
Retain for _____ weeks after report (storage fees may apply)						Name: [Signature]						Date & Time: 1/30/14 1045	

Date:

Page 5 of 14

WORK ORDER

Printed: 1/31/2014 9:22:48AM

1401656

Eurofins Frontier Global Sciences, Inc.

Client: Eastern Analytical, Inc  
Project: Merrimack Station

Project Manager: Liz Siska

Preservation Label Confirmation

Sample Bottle	Bottle Type	Preservative	Label Color	Labeled By
1401656-01 A	250 mL PETG 1631	BfCl	YELLOW	AMR
1401656-01 B	250 mL PETG 1638/200.8	HNO3	RED	
1401656-02 A	250 mL PETG 1631	BfCl	YELLOW	



Frontier Global Sciences

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Eastern Analytical, Inc  
25 Chenell Drive  
Concord NH, 03301

Project: Merrimack Station 200.8  
Project Number: -  
Project Manager: Jeff Gagne

Reported:  
13-Feb-14 13:59

**Combination WW**

**1401656-01**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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**Sample Preparation: EFGS-052 Closed Vessel Nitric Oven Digestion**

Silver	0.633	-	2.02	µg/L	100	F402078	10-Feb-14	4B11003	10-Feb-14	EPA 200.8	U
Arsenic	28.8	-	30.3	µg/L	100	F402010	03-Feb-14	4B06008	06-Feb-14	EPA 200.8	R-05, U

**Sample Preparation: EPA 1631E BrCl Oxidation**

Mercury	25.5	-	5.05	ng/L	10	F402004	01-Feb-14	4B03008	03-Feb-14	EPA 1631E	
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Eurofins Frontier Global Sciences, Inc.

Liz Siska, Project Manager

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Reported:  
13-Feb-14 13:59

**B-131151 Field Blank Hg**  
**1401656-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631E BrCl Oxidation											
Mercury	ND	-	0.50	ng/L	1	F402004	01-Feb-14	4B03008	03-Feb-14	EPA 1631E	U

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Liz Siska, Project Manager

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Eastern Analytical, Inc 25 Chenell Drive Concord NH, 03301	Project: Merrimack Station 200.8 Project Number: - Project Manager: Jeff Gagne	Reported: 13-Feb-14 13:59
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch F402004 - EPA 1631E BrCl Oxidation</b>											
<b>Blank (F402004-BLK1)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	ND	-	0.50	ng/L							U
<b>Blank (F402004-BLK2)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	ND	-	0.50	ng/L							U
<b>Blank (F402004-BLK3)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	ND	-	0.50	ng/L							U
<b>Blank (F402004-BLK4)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	ND	-	0.50	ng/L							QB-04, U
<b>LCS (F402004-BS1)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	16.02	-	0.50	ng/L	15.679		102	80-120			
<b>LCS Dup (F402004-BSD1)</b>					Prepared & Analyzed: 03-Feb-14						
Mercury	16.08	-	0.50	ng/L	15.679		103	80-120	0.402	24	
<b>Duplicate (F402004-DUP1)</b>		<b>Source: 1401607-03</b>			Prepared & Analyzed: 03-Feb-14						
Mercury	5.55	-	0.50	ng/L		5.12			8.06	24	
<b>Matrix Spike (F402004-MS1)</b>		<b>Source: 1401607-03</b>			Prepared & Analyzed: 03-Feb-14						
Mercury	23.98	-	0.50	ng/L	20.400	5.12	92.4	71-125			
<b>Matrix Spike (F402004-MS2)</b>		<b>Source: 1401688-03</b>			Prepared & Analyzed: 03-Feb-14						
Mercury	23.33	-	0.50	ng/L	20.400	4.59	91.8	71-125			
<b>Matrix Spike Dup (F402004-MSD1)</b>		<b>Source: 1401607-03</b>			Prepared & Analyzed: 03-Feb-14						
Mercury	20.87	-	0.50	ng/L	20.400	5.12	77.2	71-125	13.9	24	

Eurofins Frontier Global Sciences, Inc.

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*Liz Siska*

Liz Siska, Project Manager

Page 9 of 14



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Eastern Analytical, Inc 25 Chenell Drive Concord NH, 03301	Project: Merrimack Station 200.8 Project Number: - Project Manager: Jeff Gagne	Reported: 13-Feb-14 13:59
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F402004 - EPA 1631E BrCl Oxidation

Matrix Spike Dup (F402004-MSD2)      Source: 1401688-03      Prepared & Analyzed: 03-Feb-14

Mercury	24.40	-	0.50	ng/L	20.400	4.59	97.1	71-125	4.49	24	
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Eurofins Frontier Global Sciences, Inc.

Liz Siska, Project Manager

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Project: Merrimack Station 200.8  
Project Number: -  
Project Manager: Jeff Gagne

Reported:  
13-Feb-14 13:59

### Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch F402010 - EFGS-052 Closed Vessel Nitric Oven Digestion</b>											
<b>Blank (F402010-BLK1)</b>						Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	ND	-	0.30	µg/L							U
<b>Blank (F402010-BLK2)</b>						Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	ND	-	0.30	µg/L							U
<b>LCS (F402010-BS2)</b>						Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	47.62	-	1.51	µg/L	49.960		95.3	85-115			
<b>LCS Dup (F402010-BSD2)</b>						Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	50.98	-	1.51	µg/L	49.960		102	85-115	6.82	20	
<b>Matrix Spike (F402010-MS1)</b>						Source: 1401611-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	73.08	-	15.2	µg/L	49.960	ND	146	70-130			QM-07
<b>Matrix Spike (F402010-MS2)</b>						Source: 1401633-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	62.89	-	15.2	µg/L	49.960	ND	126	70-130			
<b>Matrix Spike (F402010-MS3)</b>						Source: 1401611-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	963.5	-	15.1	µg/L	1025.0	ND	94.0	70-130			AS
<b>Matrix Spike (F402010-MS4)</b>						Source: 1401633-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	936.9	-	15.1	µg/L	1025.0	ND	91.4	70-130			AS
<b>Matrix Spike Dup (F402010-MSD1)</b>						Source: 1401611-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	61.70	-	15.2	µg/L	49.960	ND	124	70-130	16.9	20	
<b>Matrix Spike Dup (F402010-MSD2)</b>						Source: 1401633-01 Prepared: 03-Feb-14 Analyzed: 04-Feb-14					
Arsenic	63.95	-	15.2	µg/L	49.960	ND	128	70-130	1.67	20	

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Liz Siska, Project Manager

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Frontier Global Sciences

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425.686.3096 Fax

Eastern Analytical, Inc  
25 Chenell Drive  
Concord NH, 03301

Project: Merrimack Station 200.8  
Project Number: -  
Project Manager: Jeff Gagne

Reported:  
13-Feb-14 13:59

## Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch F402010 - EFGS-052 Closed Vessel Nitric Oven Digestion</b>											
<b>Matrix Spike Dup (F402010-MSD3)</b>		<b>Source: 1401611-01</b>			<b>Prepared: 03-Feb-14 Analyzed: 04-Feb-14</b>						
Arsenic	950.3	-	15.1	µg/L	1025.0	ND	92.7	70-130	1.38	20	AS
<b>Matrix Spike Dup (F402010-MSD4)</b>		<b>Source: 1401633-01</b>			<b>Prepared: 03-Feb-14 Analyzed: 04-Feb-14</b>						
Arsenic	944.8	-	15.1	µg/L	1025.0	ND	92.2	70-130	0.834	20	AS
<b>Batch F402078 - EFGS-052 Closed Vessel Nitric Oven Digestion</b>											
<b>Blank (F402078-BLK1)</b>		<b>Prepared &amp; Analyzed: 10-Feb-14</b>									
Silver	ND	-	0.020	µg/L							U
<b>Blank (F402078-BLK2)</b>		<b>Prepared &amp; Analyzed: 10-Feb-14</b>									
Silver	ND	-	0.020	µg/L							U
<b>LCS (F402078-BS1)</b>		<b>Prepared &amp; Analyzed: 10-Feb-14</b>									
Silver	0.874	-	0.100	µg/L	1.0000		87.4	85-115			
<b>LCS Dup (F402078-BSD1)</b>		<b>Prepared &amp; Analyzed: 10-Feb-14</b>									
Silver	0.954	-	0.100	µg/L	1.0000		95.4	85-115	8.80	20	
<b>Matrix Spike (F402078-MS1)</b>		<b>Source: 1402060-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	0.855	-	0.101	µg/L	1.0000	0.009	84.6	70-130			
<b>Matrix Spike (F402078-MS2)</b>		<b>Source: 1402131-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	0.926	-	0.101	µg/L	1.0000	0.058	86.7	70-130			
<b>Matrix Spike (F402078-MS3)</b>		<b>Source: 1402060-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	4.802	-	0.101	µg/L	5.1250	0.009	93.5	70-130			AS

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Project Number: -  
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Reported:  
13-Feb-14 13:59

### Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch F402078 - EFGS-052 Closed Vessel Nitric Oven Digestion

<b>Matrix Spike Dup (F402078-MSD1)</b>		<b>Source: 1402060-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	1.000	-	0.101	µg/L	1.0000	0.009	99.1	70-130	15.6	20	
<b>Matrix Spike Dup (F402078-MSD2)</b>		<b>Source: 1402131-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	1.025	-	0.101	µg/L	1.0000	0.058	96.6	70-130	10.2	20	
<b>Matrix Spike Dup (F402078-MSD3)</b>		<b>Source: 1402060-01</b>			<b>Prepared &amp; Analyzed: 10-Feb-14</b>						
Silver	4.984	-	0.101	µg/L	5.1250	0.009	97.1	70-130	3.72	20	AS

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*Liz Siska*

Liz Siska, Project Manager

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Eastern Analytical, Inc 25 Chenell Drive Concord NH, 03301	Project: Merrimack Station 200.8 Project Number: - Project Manager: Jeff Gagne	Reported: 13-Feb-14 13:59
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#### Notes and Definitions

U	Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
R-05	The sample was diluted due to the presence of high levels of non-target analytes or particulates resulting in elevated reporting limits.
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
QB-04	The blank was preserved to 2% BrCl rather than 1%. The control limit for blanks preserved to greater than 1% BrCl is the preservation percentage multiplied by the MRL.
AS	This MS and/or MSD is an analytical spike and/or an analytical spike duplicate.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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## CHAIN-OF-CUSTODY RECORD

128524

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

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SAMPLE I.D.	SAMPLING DATE / TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE / TIME	MATRIX (SEE BELOW)	VOC		SVOC		TCMP METALS		INORGANICS		MICRO	OTHER	NOTES	
			GRAB	*COMPOSITE	TCMP	SVOC	TCMP	INORGANICS	INORGANICS					
Combination WW	1/29/14 7:50am WW	b	524.2	524.2 BTEX	524.2 MTBE ONLY									
			8260B	624	VTICS									
			1, 4 DIOXANE											
			8021B	BTEX	HALOS									
			8015B	GRO	MAVPH									
			8270D	625	SVTICS	EDB	DBCP							
			ABN	A	8N	PAH								
			TPH8100	LI	L2									
			8015B	DRO	MAEPH									
			PEST 608	PCB 608										
			PEST 8081A	PCB 8082										
			<u>OIL &amp; GREASE 1664</u>	TPH 1664										
			TCMP 1311	ABN	METALS									
			VOC	PEST	HERB									
			DISSOLVED METALS (LIST BELOW)											
TOTAL METALS (LIST BELOW)														
			TS	TSS	TDS	SPEC. CON.								
			Br	Cl	F	SO <sub>4</sub>								
			NO <sub>2</sub>	NO <sub>3</sub>	NO <sub>2</sub> NO <sub>3</sub>									
			CO <sub>2</sub>	CBOD	T. ALK.									
			TKN	NH <sub>3</sub>	T. PHOS.	O. PHOS.								
			pH	T. RES. CHLORINE										
			<u>COD</u>	PHENOLS	TOC	DOC								
TOTAL CYANIDE			TOTAL SULFIDE											
REACTIVE CYANIDE			REACTIVE SULFIDE											
FLASHPOINT			IGNITABILITY											
TOTAL COLIFORM			E. COLI											
FECAL COLIFORM														
ENTEROCOCCI														
HETEROTROPHIC PLATE COUNT														
			<u>Total Nitrogen</u>											
			# of CONTAINERS											
			11											
			Plus field											
			MeOH Vial #											

PROJECT MANAGER: Paul Peeler  
COMPANY: GZA GEOTECHNICAL  
ADDRESS: 80 Harvey Blvd  
CITY: MANCHESTER STATE: NH ZIP: 03103  
PHONE: 888-8717 EXT: \_\_\_\_\_  
FAX: \_\_\_\_\_  
E-MAIL: Paul.Peeler@gza.com  
SITE NAME: 8NH-M12  
PROJECT #: 3902  
STATE: NH MA ME VT OTHER: \_\_\_\_\_  
REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR  
GWP, OIL FUND, BROWNFIELD OR OTHER: \_\_\_\_\_  
QUOTE #: \_\_\_\_\_ PO #: \_\_\_\_\_

DATE NEEDED: STANDARD TAT  
QA/QC REPORTING LEVEL: A B C  
OR  
PRESUMPTIVE CERTAINTY  
REPORTING OPTIONS  
PRELIMS: YES OR NO  
IF YES: FAX OR PDF  
ELECTRONIC OPTIONS  
NO FAX E-MAIL PDF EQUIS  
TEMP. 6.1 °C  
ICE? YES NO  
SAMPLER(S): Paul Peeler, GZA  
RELINQUISHED BY: Paul Peeler DATE: 1/29/14 TIME: 11:40am  
RELINQUISHED BY: Paul Peeler DATE: 1/29/14 TIME: 11:40am  
RELINQUISHED BY: Paul Peeler DATE: 1/29/14 TIME: 11:40am  
RELINQUISHED BY: Paul Peeler DATE: 1/29/14 TIME: 11:40am

METALS: 8 RCRA 13 PP FE, MN Pb, Cu  
OTHER METALS: Hg, As, Ag  
SAMPLES FIELD FILTERED? ☐ YES ☐ NO  
NOTES: (E: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)  
Please send metals to frontier for analysis by method 800.8 MGD (ICOMs with coll's van can)  
SITE HISTORY: \_\_\_\_\_  
SUSPECTED CONTAMINATION: \_\_\_\_\_  
FIELD READINGS: PH: 8.0